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1645

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/966,781A

DATE: 02/11/2002

TIME: 14:26:05

Input Set : A:\A28lus11.app
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3 <110> APPLICANT: SOULARD, PATRICIA
 5 <120> TITLE OF INVENTION: POLYPEPTIDES EXHIBITING PDE7 ACTIVITY AND THEIR USE FOR
 6 SELECTING COMPOUNDS WHICH INHIBIT PDE7 ENZYME ACTIVITY
 8 <130> FILE REFERENCE: A0000281US
 10 <140> CURRENT APPLICATION NUMBER: 09/966781A
 11 <141> CURRENT FILING DATE: 2001-09-28
 13 <150> PRIOR APPLICATION NUMBER: EP004026837
 14 <151> PRIOR FILING DATE: 2000-09-28
 16 <160> NUMBER OF SEQ ID NOS: 35
 18 <170> SOFTWARE: PatentIn Ver. 2.1
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 426
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Homo sapiens
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 30 20 25 30
 32 Asp Phe Arg Ile Phe His Ser Gln Ser Glu Ile Glu Val Ser Val Ser
 33 35 40 45
 35 Ala Arg Asn Ile Arg Arg Leu Leu Ser Phe Gln Arg Tyr Leu Arg Ser
 36 50 55 60
 38 Ser Arg Phe Phe Arg Gly Thr Ala Val Ser Asn Ser Leu Asn Ile Leu
 39 65 70 75 80
 41 Asp Asp Asp Tyr Asn Gly Gln Ala Lys Cys Met Leu Glu Lys Val Gly
 42 85 90 95
 44 Asn Trp Asn Phe Asp Ile Phe Leu Phe Asp Arg Leu Thr Asn Gly Asn
 45 100 105 110
 47 Ser Leu Val Ser Leu Thr Phe His Leu Phe Ser Leu His Gly Leu Ile
 48 115 120 125
 50 Glu Tyr Phe His Leu Asp Met Met Lys Leu Arg Arg Phe Leu Val Met
 51 130 135 140
 53 Ile Gln Glu Asp Tyr His Ser Gln Asn Pro Tyr His Asn Ala Val His
 54 145 150 155 160
 56 Ala Ala Asp Val Thr Gln Ala Met His Cys Tyr Leu Lys Glu Pro Lys
 57 165 170 175
 59 Leu Ala Asn Ser Val Thr Pro Trp Asp Ile Leu Leu Ser Leu Ile Ala
 60 180 185 190
 62 Ala Ala Thr His Asp Leu Asp His Pro Gly Val Asn Gln Pro Phe Leu
 63 195 200 205
 65 Ile Lys Thr Asn His Tyr Leu Ala Thr Leu Tyr Lys Asn Thr Ser Val
 66 210 215 220

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68 Leu Glu Asn His His Trp Arg Ser Ala Val Gly Leu Leu Arg Glu Ser
69 225 230 235 240
71 Gly Leu Phe Ser His Leu Pro Leu Glu Ser Arg Gln Gln Met Glu Thr
72 245 250 255
74 Gln Ile Gly Ala Leu Ile Leu Ala Thr Asp Ile Ser Arg Gln Asn Glu
75 260 265 270
77 Tyr Leu Ser Leu Phe Arg Ser His Leu Asp Arg Gly Asp Leu Cys Leu
78 275 280 285
80 Glu Asp Thr Arg His Arg His Leu Val Leu Gln Met Ala Leu Lys Cys
81 290 295 300
83 Ala Asp Ile Cys Asn Pro Cys Arg Thr Trp Glu Leu Ser Lys Gln Trp
84 305 310 315 320
86 Ser Glu Lys Val Thr Glu Glu Phe Phe His Gln Gly Asp Ile Glu Lys
87 325 330 335
89 Lys Tyr His Leu Gly Val Ser Pro Leu Cys Asp Arg His Thr Glu Ser
90 340 345 350
92 Ile Ala Asn Ile Gln Ile Gly Phe Met Thr Tyr Leu Val Glu Pro Leu
93 355 360 365
95 Phe Thr Glu Trp Ala Arg Phe Ser Asn Thr Arg Leu Ser Gln Thr Met
96 370 375 380
98 Leu Gly His Val Gly Leu Asn Lys Ala Ser Trp Lys Gly Leu Gln Arg
99 385 390 395 400
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109 <211> LENGTH: 426
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113 <400> SEQUENCE: 2
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117 Ser Arg Ala Gly Phe Glu Thr Glu Arg Arg Gly Ser His Pro Tyr Ile
118 20 25 30
120 Asp Phe Arg Ile Phe His Ser Gln Ser Asp Ile Glu Ala Ser Val Ser
121 35 40 45
123 Ala Arg Asn Ile Arg Arg Leu Leu Ser Phe Gln Arg Tyr Leu Arg Ser
124 50 55 60
126 Ser Arg Val Phe Arg Gly Ala Thr Val Cys Ser Ser Leu Asp Ile Leu
127 65 70 75 80
129 Asp Glu Asp Tyr Asn Gly Gln Ala Lys Cys Met Leu Glu Lys Val Gly
130 85 90 95
132 Asn Trp Asn Phe Asp Ile Phe Leu Phe Asp Arg Leu Thr Asn Gly Asn
133 100 105 110
135 Ser Leu Val Ser Leu Thr Phe His Leu Phe Ser Leu His Gly Leu Ile
136 115 120 125
138 Glu Tyr Phe His Leu Asp Met Val Lys Leu Arg Arg Phe Leu Val Met
139 130 135 140

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141 Ile Gln Glu Asp Tyr His Ser Gln Asn Pro Tyr His Asn Ala Val His
142 145 150 155 160
144 Ala Ala Asp Val Thr Gln Ala Met His Cys Tyr Leu Lys Glu Pro Lys
145 165 170 175
147 Leu Ala Ser Ser Val Thr Pro Trp Asp Ile Leu Leu Ser Leu Ile Ala
148 180 185 190
150 Ala Ala Thr His Asp Leu Asp His Pro Gly Val Asn Gln Pro Phe Leu
151 195 200 205
153 Ile Lys Thr Asn His Tyr Leu Ala Thr Leu Tyr Lys Asn Ser Ser Val
154 210 215 220
156 Leu Glu Asn His His Trp Arg Ser Ala Val Gly Leu Leu Arg Glu Ser
157 225 230 235 240
159 Gly Leu Phe Ser His Leu Pro Leu Glu Ser Arg Gln Glu Met Glu Ala
160 245 250 255
162 Gln Ile Gly Ala Leu Ile Leu Ala Thr Asp Ile Ser Arg Gln Asn Glu
163 260 265 270
165 Tyr Leu Ser Leu Phe Arg Ser His Leu Asp Lys Gly Asp Leu His Leu
166 275 280 285
168 Asp Asp Gly Arg His Arg His Leu Val Leu Gln Met Ala Leu Lys Cys
169 290 295 300
171 Ala Asp Ile Cys Asn Pro Cys Arg Asn Trp Glu Leu Ser Lys Gln Trp
172 305 310 315 320
174 Ser Glu Lys Val Thr Glu Glu Phe Phe His Gln Gly Asp Ile Glu Lys
175 325 330 335
177 Lys Tyr His Leu Gly Val Ser Pro Leu Cys Asp Arg Gln Thr Glu Ser
178 340 345 350
180 Ile Ala Asn Ile Gln Ile Gly Phe Met Thr Tyr Leu Val Glu Pro Leu
181 355 360 365
183 Phe Thr Glu Trp Ala Arg Phe Ser Ala Thr Arg Leu Ser Gln Thr Met
184 370 375 380
186 Leu Gly His Val Gly Leu Asn Lys Ala Ser Trp Lys Gly Leu Gln Arg
187 385 390 395 400
189 Gln Gln Pro Ser Ser Glu Asp Ala Asn Ala Ala Phe Glu Leu Asn Ser
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197 <211> LENGTH: 426
198 <212> TYPE: PRT
199 <213> ORGANISM: Rattus sp.
201 <400> SEQUENCE: 3
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203 1 5 10 15
205 Ser Arg Ala Gly Phe Glu Thr Glu Arg Arg Gly Ser His Pro Tyr Ile
206 20 25 30
208 Asp Phe Arg Ile Phe His Ala Gln Ser Glu Ile Glu Ala Ser Val Ser
209 35 40 45
211 Ala Arg Asn Ile Arg Arg Leu Leu Ser Phe Gln Arg Tyr Leu Arg Ser
212 50 55 60

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Input Set : A:\A281us11.app
Output Set: N:\CRF3\02112002\I966781A.raw

214 Ser Arg Phe Phe Arg Gly Ala Thr Val Cys Arg Ser Leu Asn Ile Leu
215 65 70 75 80
217 Asp Glu Asp Tyr Asn Gly Gln Ala Lys Cys Met Leu Glu Lys Val Gly
218 85 90 95
220 Asn Trp Asn Phe Asp Ile Phe Leu Phe Asp Arg Leu Thr Asn Gly Asn
221 100 105 110
223 Ser Leu Val Ser Leu Thr Phe His Leu Phe Ser Leu His Gly Leu Ile
224 115 120 125
226 Glu Tyr Phe His Leu Asp Met Val Lys Leu Arg Arg Phe Leu Val Met
227 130 135 140
229 Ile Gln Glu Asp Tyr His Ser Gln Asn Pro Tyr His Asn Ala Val His
230 145 150 155 160
232 Ala Ala Asp Val Thr Gln Ala Met His Cys Tyr Leu Lys Glu Pro Lys
233 165 170 175
235 Leu Ala Asn Ser Val Thr Pro Trp Asp Ile Leu Leu Ser Leu Ile Ala
236 180 185 190
238 Ala Ala Thr His Asp Leu Asp His Pro Gly Val Asn Gln Pro Phe Leu
239 195 200 205
241 Ile Lys Thr Asn His Tyr Leu Ala Thr Leu Tyr Lys Asn Thr Ser Val
242 210 215 220
244 Leu Glu Asn His His Trp Arg Ser Ala Val Gly Leu Leu Arg Glu Ser
245 225 230 235 240
247 Gly Leu Phe Ser His Leu Pro Leu Glu Ser Arg His Glu Met Glu Ala
248 245 250 255
250 Gln Ile Gly Ala Leu Ile Leu Ala Thr Asp Ile Ser Arg Gln Asn Glu
251 260 265 270
253 Tyr Leu Ser Leu Phe Arg Ser His Leu Asp Lys Gly Asp Leu His Leu
254 275 280 285
256 Asp Asp Gly Arg His Arg His Leu Val Leu Gln Met Ala Leu Lys Cys
257 290 295 300
259 Ala Asp Ile Cys Asn Pro Cys Arg Asn Trp Glu Leu Ser Lys Gln Trp
260 305 310 315 320
262 Ser Glu Lys Val Thr Glu Glu Phe Phe His Gln Gly Asp Ile Glu Lys
263 325 330 335
265 Lys Tyr His Leu Gly Val Ser Pro Leu Cys Asp Arg Gln Thr Glu Ser
266 340 345 350
268 Ile Ala Asn Ile Gln Ile Gly Phe Met Thr Tyr Leu Gln Glu Pro Leu
269 355 360 365
271 Phe Thr Glu Trp Ala Arg Phe Ser Asp Thr Arg Leu Ser Gln Thr Met
272 370 375 380
274 Leu Gly His Val Gly Leu Asn Lys Ala Ser Trp Lys Gly Leu Gln Arg
275 385 390 395 400
277 Gln Gln Pro Ser Ser Glu Asp Ala Ser Ala Ala Phe Glu Leu Asn Ser
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280 Gln Leu Leu Thr Gln Glu Asn Arg Leu Ser
281 420 425
284 <210> SEQ ID NO: 4
285 <211> LENGTH: 1281
286 <212> TYPE: DNA

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PATENT APPLICATION: US/09/966,781A

DATE: 02/11/2002
TIME: 14:26:05

Input Set : A:\A28lus11.app
Output Set: N:\CRF3\02112002\I966781A.raw

287 <213> ORGANISM: Homo sapiens
 289 <400> SEQUENCE: 4
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 292 tctgaaattt aagtgtctgt ctctgcagg aatatacgaa ggctactaag tttccagcga 180
 293 tatcttagat cttcacgcct tttcgtggt actgcgggtt caaattccct aaacatttt 240
 294 gatgatgatt ataatggaca agccaagtgt atgcggaaa aagttggaaa ttggatattt 300
 295 gatatacttcc tatttgatag actaacaat gggaaatagtc tagtaagctt aacctttcat 360
 296 ttatTTAGTC ttcatggatt aatttgatgtc ttccattttat atatgtatgaa acttcgttaga 420
 297 ttttagtta tgattcaaga agattaccac agtcaaaatc cttaccataa cgcaagtccac 480
 298 gctgcggatg ttactcaggc catgcactgt tacttaaagg aacctaagct tgccaattct 540
 299 gtaactccctt gggatatctt gctgagctt attgcagctg ccactcatga tctggatcat 600
 300 ccaggtgtta atcaacccctt ctttattaaa actaaccatt acttggcaac tttatatacg 660
 301 aataacctcg tactggaaaa tcaccactgg agatctgcag tgggcttatt gagagaatca 720
 302 ggcttattct cacatctgcc attagaaagc aggcaacaaa tggagacaca gatagggtct 780
 303 ctgatactag ccacagacat cagtcgcagg aatgagtttgc tgcattttt taggtcccat 840
 304 ttggatagag gtgattttatg cctagaagac accagacaca gacattttgtt tttacagatg 900
 305 gctttgaaat gtgctgatat ttgttaaccctt tgcggacgt gggattaag caagcagtgg 960
 306 agtggaaaatg taacggagga attcttccat caaggagata tagaaaaaaa atatcatttg 1020
 307 ggtgtgagtc cactttgcga tcgtcacact gaatcttatttgc ccaacatcca gattgggttt 1080
 308 atgacttacc tagtggagcc ttatattaca gaatggccca gttttccaa tacaaggctt 1140
 309 tcccagacaa tgcttggaca cgtggggctg aataaagcca gctggaaagg actgcagaga 1200
 310 gaacagtgcga gcagtggagga cactgtatgtc gcattttgtt tgaactcaca gttattaccc 1260
 311 caggaaaaatc gtttatcata a 1281
 314 <210> SEQ ID NO: 5
 315 <211> LENGTH: 1281
 316 <212> TYPE: DNA
 317 <213> ORGANISM: Mus sp.
 319 <400> SEQUENCE: 5
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 322 tctgaaattt aagtgtctgt ctctgcagg aatatacgaa ggctactaag tttccagcga 180
 323 tatcttagat cttcacgcct tttcgtggt actgcgggtt caaattccct aaacatttt 240
 324 gatgatgatt ataatggaca agccaagtgt atgcggaaa aagttggaaa ttggatattt 300
 325 gatatacttcc tatttgatag actaacaat gggaaatagtc tagtaagctt aacctttcat 360
 326 ttatTTAGTC ttcatggatt aatttgatgtc ttccattttat atatgtatgaa acttcgttaga 420
 327 ttttagtta tgattcaaga agattaccac agtcaaaatc cttaccataa cgcaagtccac 480
 328 gctgcggatg ttactcaggc catgcactgt tacttaaagg aacctaagct tgccaattct 540
 329 gtaactccctt gggatatctt gctgagctt attgcagctg ccactcatga tctggatcat 600
 330 ccaggtgtta atcaacccctt ctttattaaa actaaccatt acttggcaac tttatatacg 660
 331 aataacctcg tactggaaaa tcaccactgg agatctgcag tgggcttatt gagagaatca 720
 332 ggcttattct cacatctgcc attagaaagc aggcaacaaa tggagacaca gatagggtct 780
 333 ctgatactag ccacagacat cagtcgcagg aatgagtttgc tgcattttt taggtcccat 840
 334 ttggatagag gtgattttatg cctagaagac accagacaca gacattttgtt tttacagatg 900
 335 gctttgaaat gtgctgatat ttgttaaccctt tgcggacgt gggattaag caagcagtgg 960
 336 agtggaaaatg taacggagga attcttccat caaggagata tagaaaaaaa atatcatttg 1020
 337 ggtgtgagtc cactttgcga tcgtcacact gaatcttatttgc ccaacatcca gattgggttt 1080
 338 atgacttacc tagtggagcc ttatattaca gaatggccca gttttccaa tacaaggctt 1140
 339 tcccagacaa tgcttggaca cgtggggctg aataaagcca gctggaaagg actgcagaga 1200



VERIFICATION SUMMARY

PATENT APPLICATION: US/09/966,781A

DATE: 02/11/2002

TIME: 14:26:06

Input Set : A:\A281us11.app

Output Set: N:\CRF3\02112002\I966781A.raw

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L:914 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
L:915 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
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